

## DETAILED ACTION

### *Examiner's Amendment*

1. During telephone conversation with Nathaniel T. Wallace, Attorney for the Applicants, Registration Number 48,909 on June 1, 2009 authorizations for this Examiner's amendment was given in a telephone interview.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

*In the claims,*

40. (Currently Amended) A ~~computer-readable medium~~ program storage device readable by machine embodying instructions executed by a ~~processor~~ the machine to perform method steps for processing multimedia data in a computer system, said method steps comprising:

receiving as input a high-level concept describing data to be accessed;

translating the high-level concept into a low-level query by using stored concept constructs which are defined using features derived from a plurality of application domains, wherein the stored concept constructs are each represented using a hierarchical fuzzy graph data tree-structure comprising nodes that correspond to child-concepts and a subset of the features, aggregation edges that correspond to parent-child relationships, and association edges between siblings that correspond

to inter-sibling constraints, wherein each aggregation edge is assigned a weight reflecting relative importance of each child-concept in relation to its siblings and the relative importance corresponds to a relevance of a child-concept to the high-level concept;

retrieving results using the low-level query;

joining the results to obtain a match combination according to a matching algorithm, by determining an assignment for the child-concepts, subject to the inter-sibling constraints and the weights corresponding to the child-concepts; and

presenting the match combination to a user.

41. (Currently Amended) A ~~computer-readable medium~~ program storage device as defined in Claim 40, further comprising:

storing the concept constructs in a concept library module;

storing the features in a feature library module;

storing constraints in a constraint library module; and

storing matching algorithms in a matching algorithm library module.

42. (Currently Amended) A ~~computer-readable medium~~ program storage device as defined in Claim 41, further comprising interfacing the library modules to the application domains.

43. (Currently Amended) A ~~computer-readable medium~~ program storage device as defined in Claim 41, further comprising building a concept construct.

44. (Currently Amended) A ~~computer-readable medium~~ program storage device as defined in Claim 43, wherein the step of building a concept construct comprises combining one or more of the features with zero or more of the stored concepts and zero or more of the constraints.

45. (Currently Amended) A ~~computer-readable medium~~ program storage device as defined in Claim 40, wherein the features are user defined.

#### ***Allowable Subject Matter***

2. Claims 40 - 45 are hereby indicated as allowable over the prior art of record.

The following is an examiner's statement of reasons for indicating allowable subject matter.

The prior arts of record, Han teaches applying a knowledge discovery algorithm on data stored in a database, with the assistance of concept hierarchy information while Agouris teaches matching a query sketch to a feature against features at the parent level in a tree, then progressing to the child level, the grandchild level, and other levels as necessary.

Han and Agouris either singularly or in combination fail to anticipate or render obvious the recited "joining the results to obtain a match combination according to a matching algorithm, by determining an assignment for the child-concepts, subject to the

inter-sibling constraints and the weights corresponding to the child-concepts" as claimed in Claim 40.

The dependent claims, being definite, further limiting, and fully enabled by the specification are also indicated as allowable.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED I. EHICHIOYA whose telephone number is (571)272-4034. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pierre M. Vital can be reached on 571-272-4215. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fred I. Ehichioya/  
Examiner, Art Unit 2156